



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

December 2, 2003

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Pollution Control Industries, Inc. / MSM 089-15970-00345

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-MOD.dot 9/16/03



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Mr. Tita LaGrimas
Pollution Control Industries, Inc.
4343 Kennedy Avenue
East Chicago, Indiana 46312

Re: Minor Source Modification No:
089-15970-00345

Dear Mr. LaGrimas:

Pollution Control Industries, Inc. applied for a Part 70 operating permit on December 16, 1996 for a waste processing and handling plant. An application to modify the source was received on August 6, 2002 and a revised application was received on October 15, 2003. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 01.
- (b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) scrubber (for particulate control, venting through stack SDS 04).
- (c) One (1) distillation unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.
- (d) One (1) condensed liquid tank, identified as tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons.
- (e) Three (3) product tanks, identified as tank 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons.
- * (f) One (1) hot oil heater, constructed in 2004, using natural gas as fuel, with a maximum heat input rate of 2.5 MMBtu/hr, exhausting through stack SDS 06.

*Note: This unit is considered an insignificant activity, pursuant to 326 IAC 2-7-1(21)(G)(i).

The proposed Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.



Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Lake County
U.S. EPA, Region V
Lake County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels/Ramesh Tejuja
Compliance Data Section - Karen Ampil
Administrative and Development - Sara Cloe
Technical Support and Modeling - Michele Boner
Part 70 Permit File: T089-7738-00345
Part 70 Permit Reviewer: ERG/DG



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Governor

Lori F. Kaplan
Commissioner

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PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

**Pollution Control Industries, Inc.
4343 Kennedy Avenue
East Chicago, Indiana 46312**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 089-15970-00345	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:December 2, 2003

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SECTION A

SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary waste processing and handling plant.

Responsible Official:	Executive V.P. of Regulatory Affairs
Source Address:	4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address:	4343 Kennedy Avenue, East Chicago, Indiana 46312
General Source Phone Number:	219-397-3951
SIC Code:	4953
County Location:	Lake
Source Location Status:	Nonattainment for PM10, SO2, and Ozone Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD and Major Source under Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 01.
- (b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) scrubber (for particulate control, venting through stack SDS 04).
- (c) One (1) distillation unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.
- (d) One (1) condensed liquid tank, identified as tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons.
- (e) Three (3) product tanks, identified as tank 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.4 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.116b Subpart Kb, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

- (a) Commencement of construction date (no later than 30 days after such date);
- (b) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- (c) Actual start-up date (within 15 days after such date); and
- (d) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ,. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for the unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

- (a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40

CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.11 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63 , such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the permittee shall promptly notify the IDEM, OAQ and OES of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)

or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Northwest Regional Office

Telephone No.: 1-888-209-8892, or

Telephone No. 219-881-6712

Facsimile No.: 219-881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(i) be revised in response to an emergency.

- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.15 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.16 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 01.
- (b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) scrubber (for particulate control, venting through stack SDS 04).
- (c) One (1) distillation unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.
- (d) One (1) condensed liquid tank, identified as tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons.
- (e) Three (3) product tanks, identified as tank 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 General Provisions relating to NESHAP [326 IAC 20-23][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-23, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 63, Subpart DD, Table 2.

D.1.2 NESHAP for Offsite Waste and Recovery Operations [326 IAC 20-23] [40 CFR 63, Subpart DD]

- (a) Pursuant to 40 CFR 63.683(b)(1), the Permittee shall comply with one of the following requirements for the off-site material management units (the SDS shredder, the ATDU, and the tanks 01 through 04), except for those units exempted under 40 CFR 63.683(b)(2).
 - (1) The Permittee shall control air emissions from the off-site material management unit in accordance with the applicable standards specified in 40 CFR 63.685 through 63.689.
 - (2) The Permittee shall remove or destroy HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in 40 CFR 63.684.
 - (3) The Permittee shall determine, before placing off-site material in the off-site material management unit, that the average Volatile Organic Hazardous Air Pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b). This initial determination must

be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

- (b) Pursuant to 40 CFR 63.683(c)(1), the Permittee shall comply with one of the following for process vents (the distillation unit), except for those units exempted under 40 CFR 63.683(c)(2).
 - (1) The Permittee shall control air emissions from the process vent in accordance with the standards specified in 40 CFR 63.690.
 - (2) The Permittee shall determine, before placing off-site material in the process equipment associated with the process vent, that the average VOHAP concentration of the off-site material is less than the ppmw at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b) before any portion of the off-site material stream is placed in the unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.
- (c) Pursuant to 40 CFR 63.683(d), the Permittee must control equipment leaks from each equipment component that is part of the affected source specified in 40 CFR 63.680(c)(3) by implementing leak detection and control measures in accordance with the standards specified in 40 CFR 63.691.

D.1.3 NESHAP for Equipment Leaks (Fugitive Emission Sources) of Benzene [326 IAC 14-7] [40 CFR 61, Subpart J]

This source does not handle fluids that are at least ten percent (10%) benzene by weight. Therefore, the requirements of 326 IAC 14-7 and 40 CFR 61, Subpart J are not applicable. Any change or modification which results in the source handling a fluid that is at least ten percent (10%) benzene by weight must receive prior approval from IDEM, OAQ.

D.1.4 NESHAP for Benzene Waste Operations [326 IAC 14-1] [40 CFR 61, Subpart FF]

This source does not accept benzene-containing wastes from chemical manufacturing plants, coke by-product recovery plants, or petroleum refineries. Therefore, the requirements of 326 IAC 14-1 and 40 CFR 61, Subpart FF are not applicable. Any change or modification which results in the source accepting a benzene-containing waste from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery must receive prior approval from IDEM, OAQ. The Permittee shall maintain records sufficient to demonstrate that no benzene-containing wastes are accepted from these industries.

D.1.5 Volatile Organic Compounds (VOCs) [326 IAC 12-1][40 CFR 60.116b, Subpart Kb]

Pursuant to 40 CFR 60.116b, Subpart Kb (New Source Performance Standards for Volatile Organic Liquid Storage Vessels), tank 01 has the following requirements:

- (a) Pursuant to 40 CFR 60.116b(b), the Permittee shall keep readily accessible records of the following for the life time of the source:
 - (1) the dimension of the storage vessel; and

- (2) an analysis showing the capacity of the storage vessel.
- (b) Pursuant to 40 CFR 60.116b(f)(A), prior to the initial filling of the vessel storing a waste mixture of indeterminate or variable composition, the Permittee shall determine the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored using the methods described in 40 CFR 60.116b(e).

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-9]

Pursuant to 326 IAC 8-9-6 (Volatile Organic Liquid Storage Vessels), the Permittee shall maintain a record and submit to the department a report containing the following information on tanks 02 through 04:

- (a) The vessel identification number.
- (b) The vessel dimensions.
- (c) The vessel capacity.
- (d) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.

The owner or operator of a stationary vessel shall keep all records as described for the life of the vessel.

D.1.7 Emission Offset Minor Modification Limits [326 IAC 2-3]

In order to make the requirements of 326 IAC 2-3 (Emission Offset) not applicable, the VOC emissions from the SDS shredder, the ATDU, and the distillation unit shall not exceed the emission limits listed in the table below:

Unit	VOC Emission Limit (lbs/hr)
SDS Shredder	0.01
ATDU - Carbon Adsorption System (SDS 03)	0.05
Distillation Unit	0.01

This is equivalent to 0.31 tons/yr VOC emissions from these units. Combined with the emissions from the tanks and the combustion units, the emissions from this modification are limited to less than 25 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

D.1.8 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from the ATDU shall be limited to less than 10.4 lbs/hr when the process weight rate is 4 tons/hr.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.9 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11][40 CFR 63, Subpart DD]

Within 60 days after initial start-up but no later than 180 days after issuance of this permit, in order to demonstrate compliance with Conditions D.1.2 and D.1.7, the Permittee shall perform VOC testing for the SDS shredder, the ATDU, and the distillation unit utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.11 Particulate Control

In order to comply with Condition D.1.8, the scrubber equipped with the ATDU for particulate control shall be in operation and control emissions from the ATDU at all times that the ATDU is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.12 Inspection and Monitoring Requirements [326 IAC 20-23] [40 CFR Part 63, Subpart DD]

The Permittee shall comply with the inspection and the monitoring requirements specified in 40 CFR 63.695.

D.1.13 Carbon Adsorption System Monitoring Requirements

The Permittee shall monitor the VOC breakthrough indicator of the carbon adsorption systems, at least once per shift when the SDS shredder, the ATDU, and the distillation unit are in operation. The Permittee shall replace the carbon canister as indicated.

D.1.14 Carbon Adsorption System Inspections

An inspection shall be performed each calendar quarter for the carbon adsorption systems controlling the SDS shredder, the ATDU, and the distillation unit. Inspections required by this condition shall not be performed in consecutive months.

D.1.15 Failure Detection

In the event that the carbon adsorption system malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

D.1.16 Visible Emissions Notations

- (a) Visible emission notations of scrubber stack (SDS 03) exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.17 Parametric Monitoring

The Permittee shall monitor and record the pressure drop and flow rate of the scrubber at least once per shift when the associated ATDU is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 2.0 and 8.0 inches of water, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. When for any one reading, the flow rate of the scrubber is less than the normal minimum of 50 gallons per minute, or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports. A pressure reading that is outside the above mention range or a flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

The instrument used for determining the pressure drop and flow rate shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months or at a frequency recommended by the manufacturer.

D.1.18 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling the ATDU. Inspections required by this condition shall not be performed in consecutive months.

D.1.19 Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.20 Record Keeping Requirements [40 CFR Part 63, Subpart DD]

Pursuant to 40 CFR 63.696:

- (a) The Permittee shall comply with the record keeping requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63, Subpart DD that apply to the affected sources and the chosen compliance method.
- (b) The Permittee shall maintain records in accordance with the requirements of 40 CFR 63.10 for the control devices.
- (c) For the tanks using fixed roofs to comply with the control requirements of 40 CFR 63.685, the Permittee shall prepare and maintain the following records:
 - (1) A record for each inspection required by 40 CFR 63.695(b), as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of the inspection.
 - (2) The owner or operator shall record for each defect detected during inspections required by 40 CFR 63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of the detection, and the corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provision of 40 CFR 63.695(b)(4), the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.
- (d) For the tanks using an enclosure to comply with the control requirements of 40 CFR 63.685, the Permittee shall prepare and maintain records for the most recent set of calculations and measurements performed by the Permittee to verify that the tank enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B.
- (e) The Permittee shall record, on a semiannual basis, the information specified as follows for those planned routine maintenance operations that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.
- (f) The Permittee shall record the information specified in 40 CFR 63.696(h)(1) through (h)(3) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of 40 CFR 63.693(d) through (h), as applicable.

D.1.21 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of the sources of the received benzene-containing wastes.
- (b) To document compliance with Condition D.1.5(a), the Permittee shall maintain records for the life of the source for tank 01 in accordance with (1) through (2) below:
 - (1) The dimension of the storage vessel; and
 - (2) An analysis showing the capacity of the storage vessel.
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain records for the life of the source for tanks 02 through 04 in accordance with (1) through (4) below:

- (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.
- (d) To document compliance with Conditions D.1.14 and D.1.18, the Permittee shall maintain records of the results of the inspections required under Conditions D.1.14 and D.1.18.
- (e) To document compliance with Condition D.1.16, the Permittee shall maintain once per shift records of visible emission notations of the scrubber exhaust (stack SDS 03).
- (f) To document compliance with Condition D.1.17, the Permittee shall maintain once per shift records of the following parameters across the scrubber associated the ATDU:
- (A) pressure drop; and
 - (B) flow rate.
- (g) To document compliance with Condition D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (h) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.22 Reporting Requirements [40 CFR 63, Subpart DD]

- (a) Pursuant to 40 CFR 63.697, the Permittee shall submit all of the notifications required by 40 CFR 63.9 as specified in Table 2 of 40 CFR 63, Subpart DD that apply to the affected source and chosen compliance method. These notifications include, but are not limited to, the following:
- (1) An Initial Notification containing the information specified in 40 CFR 63.9(b)(2) no later than 120 days after initial start up.
 - (2) The Permittee shall submit reports in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of 40 CFR 63, Subpart DD.
 - (3) The Permittee of a control device used to meet the requirements of 40 CFR 63.693 shall submit the following notifications and reports:
 - (A) A notification of performance tests specified in 40 CFR 63.7 and 63.9(g).
 - (B) Performance test reports specified in 40 CFR 63.10(d)(2).
 - (C) Startup, shutdown, and malfunction reports specified in 40 CFR 63.10(d)(5).
 - (D) A summary report specified in 40 CFR 63.10(e)(3) on a semiannual basis.

- (b) The notifications required by paragraph (a) shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Director, Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

The notifications require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Source Modification No.: 089-15970-00345

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- ? Test Result (specify) _____
- ? Report (specify) _____
- ? Notification (specify) _____
- ? Affidavit (specify) _____
- ? Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Pollution Control Industries, Inc.
Source Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Mailing Address: 4343 Kennedy Avenue, East Chicago, Indiana 46312
Source Modification No.: 089-15970-00345

This form consists of 2 pages

Page 1 of 2

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification

Source Background and Description

Source Name:	Pollution Control Industries, Inc.
Source Location:	4343 Kennedy Avenue, East Chicago, Indiana 46312
County:	Lake
SIC Code:	4953
Operation Permit No.:	T089-7738-00345
Operation Permit Issuance Date:	Pending
Minor Modification No.:	089-15970-00345
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Pollution Control Industries, Inc., relating to the construction of the following emission units and pollution control devices:

- (a) One (1) SDS shredder, identified as SDS, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 01.
- (b) One (1) Anaerobic Thermal Desorption Unit (ATDU), identified as ATDU, constructed in 2004, with a maximum throughput rate of 4 tons of waste per hour, equipped with one (1) 10 MMBtu/hr natural gas fired heater (venting through stack SDS 02), one (1) carbon adsorption system (for VOC control, venting through stack SDS 03), and one (1) scrubber (for particulate control, venting through stack SDS 04).
- (c) One (1) distillation unit, constructed in 2004, with a maximum throughput rate of 1.0 tons of liquid waste per hour, controlled by a carbon adsorption system, and exhausting to stack SDS 05.
- (d) One (1) condensed liquid tank, identified as tank 01, constructed in 2004, with a maximum capacity of 20,000 gallons.
- (e) Three (3) product tanks, identified as tank 02 through 04, constructed in 2004, each with a maximum capacity of 12,000 gallons.
- *(f) One (1) hot oil heater, constructed in 2004, using natural gas as fuel, with a maximum heat input rate of 2.5 MMBtu/hr, exhausting through stack SDS 06.

*Note: This unit is considered an insignificant activity, pursuant to 326 IAC 2-7-1(21)(G)(i).

History

On August 6, 2002, Pollution Control Industries, Inc., submitted an application to the OAQ requesting to construct and operate an indirect thermal desorption unit to recover hydrocarbon liquids from waste streams. A revised permit application, based on the results of the pilot studies for this unit, was received on October 15, 2003. Pollution Control Industries, Inc. is an existing waste processing and handling plant. The source submitted their Title V permit application on December 16, 1996. The Title V permit (T089-7738-00345) is currently being drafted and has not yet been issued.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 14, 2003. Additional information was received on October 15, 2003 and October 16, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 6). The potential to emit VOC/HAP from the storage tanks is 2.81 tons/yr. This was calculated using the EPA TANKS model, Version 4.0. The PTE calculations for the storage tanks were submitted by the applicant and have been verified and found to be accurate and correct.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	6.04
PM-10	6.04
SO ₂	0.04
VOC	22.8
CO	4.60
NO _x	5.48

*HAP's	Potential To Emit (tons/year)
A single HAP	Less than 10

TOTAL	22.5
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*Note: The received waste contains only organic HAPs only and the HAP content for each single HAP varies greatly.

Justification for Modification

This source is being modified through a Part 70 Minor Source Modification because: (1) the potential to emit PM/PM10 is greater than 5 tons/yr and less than 25 tons/yr, pursuant to 326 IAC 2-7-10.5 (d)(4)(A); and (2) the potential to emit VOC is greater than 15 lbs/day, but less than 25 tons/yr, pursuant to 326 IAC 2-7-10.5(d)(4)(A) and 326 IAC 2-7-10.5(d)(10)(A).

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment*
SO ₂	Primary Nonattainment
NO ₂	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

*Note: Lake County has been federally redesignated in 40 CFR 81.315 as attainment and the Air Pollution Control Board will be making the same redesignation in the state rules.

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Lake County has been designated as nonattainment for PM10 and SO₂. Therefore, PM10 and SO₂ emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) Lake County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
 Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and 326 IAC 2-3 and there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD and Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
-----------	-----------------------

PM	Less than 100
PM-10	Less than 100
SO ₂	Less than 100
VOC	Greater than 25
CO	Less than 100
NO _x	Less than 100

- (a) This existing source is not a PSD major stationary source because none of the attainment pollutants is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) This existing source is a Emission Offset major stationary source because this source is located in a severe ozone nonattainment area and the potential to emit VOC is greater than 25 tons/yr.
- (c) These emissions are based upon the source's Part 70 permit (T089-7738-00345) application received on December 16, 1996.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
SDS Shredder	-	-	-	Less than 0.043	-	-	Less than 0.043
ATDU - SDS 03 and 04	Less than 0.56	Less than 0.56	-	Less than 0.22	-	-	Less than 0.22
ATDU - SDS 02	0.33	0.33	0.03	0.24	3.68	4.38	Negligible
Distillation Unit	-	-	-	Less than 0.043	-	-	Less than 0.043
Hot Oil Heater (Insignificant)	0.08	0.08	0.01	0.06	0.92	1.10	Negligible
Storage Tanks (Insignificant)	-	-	-	2.81	-	-	2.81
Total PTE of This Modification	Less than 0.97	Less than 0.97	0.04	Less than 3.42	4.60	5.48	Less than 3.12
PSD and Emission Offset Thresholds	250	100	100	25	250	250	NA

- (a) This modification to an existing PSD minor stationary source is not major because the PM, CO, and NO_x emission increases are less than the PSD significant levels. Therefore,

pursuant to 326 IAC 2-2, the PSD requirements do not apply.

- (b) This modification to an existing Emission Offset major stationary source is not major because the PM₁₀, SO₂, and VOC emission increases are less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Federal Rule Applicability

- (a) Tank 01 has a capacity greater than 75 cubic meters (19,813 gallons). Therefore, tank 01 is subject to the New Source Performance Standards for Volatile Organic Liquid Storage Vessels for which construction, reconstruction, or modification commenced after July 23, 1984 (326 IAC 12, 40 CFR 60.110b - 117b, Subpart Kb).

This tank is a fixed roof tank and the vapor pressure of the liquid stored in this tank is expected to be less than 76.6 kPa. Therefore, there are no specific emission standards under 40 CFR 60.112b applicable to this tank.

Pursuant to 40 CFR 60.116b, the Permittee shall keep the following records for the 20,000 storage tank:

- (1) Pursuant to 40 CFR 60.116b(b), the Permittee shall keep readily accessible records of the following for the life time of the source:
 - (A) the dimension of the storage vessel; and
 - (B) an analysis showing the capacity of the storage vessel.
 - (2) Pursuant to 40 CFR 60.116b(f)(A), prior to the initial filling of the vessel storing a waste mixture of indeterminate or variable composition, the Permittee shall determine the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored using the methods described in 40 CFR 60.116b(e).
- (b) The three (3) 12,000 gallon production tanks have capacities less than 75 cubic meters (19,813 gallons). Therefore, the New Source Performance Standards for Volatile Organic Liquid Storage Vessels for which construction, reconstruction, or modification commenced after July 23, 1984 (326 IAC 12, 40 CFR 60.110b - 117b, Subpart Kb) are not applicable to these tanks.
 - (c) The proposed SDS shredder, ATDU, and distillation unit do not handle fluids and are not intended to operate in benzene service, which is defined as containing a fluid with 10% benzene or more, pursuant to 40 CFR 61.111. Therefore, the requirements of the National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene (326 IAC 14, 40 CFR Part 61.110-112, Subpart J) are not applicable to this modification. Any change or modification which results in the source handling a fluid that is at least ten percent (10%) benzene by weight must receive prior approval from IDEM, OAQ.
 - (d) The proposed storage tanks are not designed to store benzene exclusively. Therefore, the requirements of the National Emission Standard for Benzene Emissions From Benzene Storage Vessels (326 IAC 14, 40 CFR Part 61.270-277, Subpart Y) are not applicable to these tanks.
 - (e) This source does not accept benzene-containing wastes from chemical manufacturing

plants, coke by-product recovery plants, or petroleum refineries. Therefore, the requirements of the National Emission Standard for Benzene Waste Operations (326 IAC 14, 40 CFR Part 61.340-359, Subpart FF) are not applicable to this modification. Any change or modification which results in the source accepting a benzene-containing waste from a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery must receive prior approval from IDEM, OAQ. The Permittee shall maintain records sufficient to demonstrate that no benzene-containing wastes are accepted from these industries.

- (f) The existing source is a major HAP source, receives off-site materials as defined in 63.680(b), and is regulated as a hazardous waste treatment, storage, and disposal facility (TSDF) under either 40 CFR Part 264 or Part 265. Therefore, this source is subject to the requirements of the National Emission Standards for Hazardous Pollutants for Off-Site Waste and Recovery Operations (326 IAC 20-23, 40 CFR Part 63.680-698, Subpart DD).

Pursuant to 40 CFR 63.680(c), the affected sources include the following:

- (1) Offsite material management units, including tanks, containers, surface impoundments, oil-water separators, organic-water separators, or transfer systems. Therefore, the SDS shredder, the ATDU, and the tanks 01 through 04 at this source are considered offsite material management units.
- (2) Process vents, including the vents for the distillation process, fractionation process, thin-film evaporation process, solvent extraction process, and steam stripping process. Therefore, the proposed distillation unit at this source is considered a process vent.
- (3) Equipment leaks, including the equipment component which meets the criteria in 40 CFR 63.680(c)(3).

Pursuant to 40 CFR 63, Subpart DD, the source shall comply with the following applicable requirements:

- (1) Pursuant to 40 CFR 63.683(b)(1), the Permittee shall comply with the one of the following requirements for the off-site material management units, except for those units exempted under 40 CFR 63.683(b)(2).
 - (A) The Permittee shall control air emissions from the off-site material management unit in accordance with the applicable standards specified in 40 CFR 63.685 through 63.689.
 - (B) The Permittee shall remove or destroy HAP in the off-site material before placing the material in the off-site material management unit by treating the material in accordance with the standards specified in 40 CFR 63.684.
 - (C) The Permittee shall determine, before placing off-site material in the off-site material management unit, that the average Volatile Organic Hazardous Air Pollutant (VOHAP) concentration of the off-site material is less than 500 parts per million by weight (ppmw) at the point-of-delivery. The Permittee must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b). This initial determination must be performed either before the first time any portion of the off-site material stream is placed in the unit or by the compliance date, whichever date is later. Thereafter, the owner or

operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.

- (2) Pursuant to 40 CFR 63.683(c)(1), the Permittee shall comply with one of the following for process vents, except for those units exempted under 40 CFR 63.683(c)(2).
 - (A) The Permittee shall control air emissions from the process vent in accordance with the standards specified in 40 CFR 63.690.
 - (B) The Permittee shall determine, before placing off-site material in the process equipment associated with the process vent, that the average VOHAP concentration of the off-site material is less than the ppmw at the point-of-delivery. The owner or operator must perform an initial determination of the average VOHAP concentration of the off-site material using the procedures specified in 40 CFR 63.694(b) before any portion of the off-site material stream is placed in the unit. Thereafter, the owner or operator must review and update, as necessary, this determination at least once every calendar year following the date of the initial determination for the off-site material stream.
- (3) Pursuant to 40 CFR 63.683(d), the Permittee must control equipment leaks from each equipment component that is part of the affected source specified in 40 CFR 63.680(c)(3) by implementing leak detection and control measures in accordance with the standards specified in 40 CFR 63.691.
- (4) The Permittee must comply with the inspection and the monitoring requirements specified in 40 CFR 63.695.
- (5) The Permittee must comply with the record keeping requirements specified in 40 CFR 63.696.
- (6) The Permittee must comply with the reporting requirements specified in 40 CFR 63.697.
- (g) This modification does not involve a pollutant-specific emissions unit:
 - (1) with the potential to emit criteria pollutants before controls equal to or greater than one hundred (100) tons per year or with the potential to emit HAP before control equal to or greater than 10 tons/yr for a single HAP and 25 tons/yr for any combination of HAPs, and
 - (2) that is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64 - Compliance Assurance Monitoring (CAM) are not applicable to this modification.

State Rule Applicability - Entire Source

326 IAC 2-2 (PSD)

This source was constructed in 1980 and will be modified in 2004 (this modification). The potential to emit PM, NO_x, and CO from the existing source is less than 250 tons/yr. Therefore, the existing

source is a PSD minor source. The potential to emit PM, NO_x, and CO from this modification is each less than 250 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to this modification.

326 IAC 2-3 (Emission Offset)

This source is located in Lake County, which is nonattainment for ozone, PM₁₀, and SO₂. The existing source has potential to emit VOC greater than 25 tons/yr. Therefore, the existing source is an Emission Offset major source. In order to be a minor modification, the source has proposed to limit the emissions from the following emission units as shown in the table below:

Unit	VOC Emission Limit (lbs/hr)
SDS Shredder	0.01
ATDU - Carbon Adsorption System (SDS 03)	0.05
Distillation Unit	0.01

This is equivalent to 0.31 tons/yr VOC emissions from these units. The use of carbon adsorption systems for VOC control ensures compliance with these limits. Combined with the emissions from the tanks and the combustion units, the emissions from this modification are limited to less than 25 tons/yr. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The potential to emit HAPs from this modification is limited to less than 10 tons per year for a single HAP and less than 25 tons per year for any combination of HAPs. In addition, the units included in this modification are subject to 40 CFR 63, Subpart DD. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable to this modification.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity for the sources located in Lake County shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - SDS Shredder

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The proposed SDS shredder does not have potential VOC emissions equal or greater than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable. In addition, the source has proposed to install a carbon adsorption system to control the VOC emissions from this unit.

State Rule Applicability - Anaerobic Thermal Desorption Unit (ATDU)

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The potential VOC emissions from the ATDU are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable. In addition, the source has proposed to install a carbon adsorption system to control the VOC emissions from this unit.

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

This source is located in Lake County and is not specifically listed in Sections 326 IAC 6-1-8.1 through 326 IAC 6-1-18. The potential to emit PM from this source is less than 100 tons/yr and the actual PM emissions from this source are less than 10 tons/yr. Therefore, this source is not subject to the requirements in 326 IAC 6-1-2.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Particulate emissions from the ATDU shall be limited to 10.4 lbs/hr when the process weight rate is 4 tons/hr.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

According to the emission calculations (see Appendix A), the potential to emit PM from the ATDU after control is less than the limit above. Therefore, the ATDU is in compliance with 326 IAC 6-3-2. The use of the scrubber ensures compliance with this limit.

State Rule Applicability - Distillation Unit

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The proposed distillation unit does not have potential VOC emissions equal or greater than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable. The source has proposed to install a carbon adsorption system to control the VOC emissions from this unit.

State Rule Applicability - Storage Tanks

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

This source is located in Lake County, therefore, the volatile organic liquid storage vessels of this modification (Tank 01 through Tank 04) are subject to 326 IAC 8-9. Since these storage tanks have capacities less than 39,000 gallons, these tanks are subject to the reporting and record keeping provisions of 326 IAC 8-9-6(a) and (b), which have the following requirements:

- (a) The owner or operator of each vessel shall maintain records for the life of the vessel for the following information:
 - (1) The vessel identification number.
 - (2) The vessel dimensions.
 - (3) The vessel capacity.
 - (4) A description of the emission control equipment for each vessel described in 326 IAC 8-9-4 (a) and 4 (b), applicable, or a schedule for installation of emission control equipment on vessels described in 326 IAC 8-9-4(a) and 4 (b), if applicable, with a certification that the emission control equipment meets the applicable standards.
- (b) A report containing the information described in (a) shall be submitted to IDEM, OAQ.

However, tank 01 is subject to the requirements of NSPS, Subpart Kb. Pursuant to 326 IAC 8-9-2(8), tank 01 is exempt from the requirements of 326 IAC 8-9.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The SDS shredder and the distillation unit have applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall monitor the VOC breakthrough indicator of the carbon adsorption systems at least once per shift when the carbon adsorption systems are in operation. The Permittee shall replace the spent carbon canisters as indicated.
 - (b) An inspection shall be performed each calendar quarter of the carbon adsorption system controlling the SDS shredder and the distillation unit. Inspections required by this condition shall not be performed in consecutive months. In the event that a carbon adsorption system malfunction has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

These monitoring conditions are necessary because the carbon adsorption systems must operate properly at all times the SDS shredder and the distillation unit are in operation to ensure compliance with 326 IAC 2-3 (Emission Offset) and 40 CFR 63, Subpart DD (NESHAP for Off-Site Waste and Recovery Operations).

2. The ATDU has applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall monitor the VOC breakthrough indicator of the carbon adsorption system at least once per shift when the carbon adsorption system is in operation. The Permittee shall replace the spent carbon canisters as indicated.
 - (b) An inspection shall be performed each calendar quarter of the carbon adsorption system controlling the ATDU. Inspections required by this condition shall not be

performed in consecutive months. In the event that a carbon adsorption system malfunction has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

- (c) Visible emissions notations of the scrubber exhaust (stack SDS 03) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (d) The Permittee shall monitor and record the pressure drop and flow rate of the scrubber, at least once per shift when the associated ATDU is in operation. When for any one reading, the pressure drop across any of the scrubber is outside the normal range of 2.0 and 8.0 inches of water, the flow rate of any of the scrubbers is less than the normal minimum of 50 gallons per minute, or the ranges established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Implementation, Preparation, Records, and Reports.
- (e) An inspection shall be performed each calendar quarter of the scrubber controlling the ATDU. Inspections required by this condition shall not be performed in consecutive months. In the event that a scrubber malfunction has been observed, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

These monitoring conditions are necessary because the carbon adsorption system and the scrubber must operate properly at all times the ATDU is in operation to ensure compliance with 326 IAC 2-3 (Emission Offset), 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), and 40 CFR 63, Subpart DD (NESHAP for Off-Site Waste and Recovery Operations).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 089-15970-00345.

Appendix A: Emission Calculations
Natural Gas Combustion
(MMBtu/hr < 100)
From the NG Combustion in Anaerobic Thermal Desorption Unit (ATDU, SDS 02)

Company Name: Pollution Control Industries, Inc.
Address: 4343 Kennedy Ave., East Chicago, IN 46312
MSM: 089-15970-00345
Reviewer: ERG/YC
Date: October 16, 2003

Heat Input Capacity
MMBtu/hr

10.0

Potential Throughput
MMCF/yr

87.6

	Pollutant					
	PM*	PM10*	SO ₂	**NO _x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	0.33	0.33	0.03	4.38	0.24	3.68

*PM and PM10 emission factors are condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100.

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Potential to Emit (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton